

As Dr. Cooper observed, this species is not as "protean" as some others. It exhibits no such variations in form or color as *B. proteus*; the latter assumes almost every mutation of form, but taken on the average is less acute and has the last whorl less patulously drawn out, axially, than the *B. montezuma*. The color of *B. proteus* is variably distributed, but tends in the most strongly colored examples to be laid on in 4-6 broad, spiral bands of brown, with indistinct boundaries, separated by paler zones. In *B. montezuma* the color is seldom present, but, when it is, it is laid on in narrow, obscure zones, parallel with the incremental lines and never spirally disposed. The granulation in the Californian shell is less coarse and intense than in the Peruvian species when most developed, and the umbilicus averages much smaller in the former. All these characters are of degree rather than kind, but two features may be mentioned which appear constant and specific. In the Mexican shell the angle which the outer lip makes with the body whorl, or axial perpendicular, at its junction is invariably more acute than in *B. proteus*, which latter has the lip bent suddenly down at this point. Secondly, the larval shell or nucleus of *B. proteus* is beautifully shagreened with minute punctations or short, almost vermicular, indentations, visible plainly under a glass, and only absent when worn off by abrasion. Traces of this sculpture may always be found. In *B. montezuma* the nucleus is delicately ribbed in harmony with the incremental lines, and does not show the peculiar shagreening alluded to, a character which alone is sufficient to establish its distinctness, but the constancy of which could not be predicated from the three specimens examined by Mr. Binney.

The distribution of the species now determined by Messrs Eisen and Belding is sufficient to disprove the hypothesis of introduction by artificial means, and it is satisfactory to have our largest North American species placed upon a permanent footing.

EDIBLE MOLLUSKS OF SOUTHERN CALIFORNIA.

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In an interesting article upon the "Edible Mollusks of Rhode Island," by Mr. Horace F. Carpenter, published in the NAUTILUS some time ago, he compares the number of marine edible mollusks of Rhode Island with those reported from San Francisco by Professor Keep.

Without wishing to leave the impression that California can compete with Rhode Island in the number of species found in the "fish markets," yet the number recently reported from this State can be greatly increased. The number of shells offered for sale here is always limited, and the famous "clam-bake" of the eastern shore is never duplicated. In the Los Angeles fish markets, *Donax* and *Chione* are the most abundant.

Donax californicus Conr. is the favorite clam for soup. This tiny bivalve might seem to an observer "all shell," yet it proves a very good substitute for the oyster in soup. The shells are carefully washed, allowed to remain in fresh water some hours, boiled, then drained. The liquid drained off is, with plenty of milk added, converted into a very palatable soup, especially when one is on the beach, and has just returned to the tent after a good bath in the ocean.

Chione simillima Sby. is often offered for sale at five cents a pound. *Chione fluctifraga* Sby. and *Chione succincta* Val. are occasionally found with the former, as they are collected from the same mud flats. Soup made from this shell-fish is not finely flavored and the meat is tough.

Tivela crassatelloides Conr., large shells are sometimes sold in the markets, usually at five cents each. *Tapes staminea* Com., *Ostrea lurida* Cpr., *Ostrea virginica* Gmel. (the latter brought here from San Francisco), *Mytilus californianus* Conr., *Mytilus edulis* Linn., and *Pecten aequisulcatus* Cpr., are also occasionally offered for sale, but in limited quantities. *Haliotis cracherodii* Leach may sometimes be seen in the market, although I have not seen one this winter. Occasionally a small *Haliotis fulgens* Phil. has been seen with the former species. The Mexicans seem to be fond of this shell-fish, as I have seen three and four dozen Halioti dried and strung on a cord, the same as they string red-peppers. When dried, the Abalones, as they are named by the Mexicans, look like oblong pieces of very thick leather, more than anything else that I can describe.

The number of species found in Los Angeles city markets, and not reported from San Francisco, would, I believe, add six more to the Californian region. Professor Keep says the *Mytilus californianus* is found outside of San Francisco Bay, but does not mention it as sold in the city. *Amiantis callosa* Conr. is occasionally eaten when collected in San Pedro Bay, although I have been told it was "not a very tempting dish." As it does not live near the shore,

collectors do not often find more than single valves on the beach.

In the "Catalogue of Economic Mollusks," written by Lieutenant Francis Winslow, upon the exhibition of the U. S. Nat. Museum, at the "International Fisheries Exhibition," at London, in 1883, he says of *Macoma nasuta* Conr., "It is abundant in San Francisco Bay, and it was evidently eaten largely by aborigines, as the shell-mounds in the vicinity of the bay are largely composed of shells of this species." I have not heard of this shell-fish being eaten here, nor the much larger *Macoma secta* Conr., but Lieutenant Winslow says the former is "eaten on the Pacific coast by all classes." The same writer mentions *Platyodon cancellatus* Conr. as existing in "great abundance in Bolinas Bay and Santa Barbara. Its habits are essentially those of the 'soft clam,' and it forms one of the staple food shell-fish of the Pacific coast," although Mr. C. R. Orcutt, in his "Notes on the Mollusks of San Diego," says this shell has been collected for food at La Playa, "but the animal is bitter." I fear I am digressing, as Professor Keep's article was intended by him as the first of a series of articles reporting "food mollusks which may be bought in the markets of our country," each writer "reporting for his (or her?) own locality."

Notwithstanding the number of species we can report from California, I am compelled to admit that, in quality and number of individuals, California cannot boast of her edible mollusks.

ON A NEW SPECIES OF YOLDIA FROM CALIFORNIA.

BY W. H. DALL.

Yoldia montereyensis n. s.

Shell large, stout, inflated, with a polished, dark greenish olive epidermis; beaks eroded in all the specimens, situated in the anterior part of the middle third of the shell, not prominent; valves full and rounded, anterior end evenly rounded into the upper and basal margins; posterior end narrower, rounded, the extreme end nearer the cardinal margin with which it almost forms an angle, below sloping obliquely toward the basal margin, with a very obscure broad ray impressed in a radiating manner from the beaks toward the oblique slope, the profile of which it does not perceptibly indent; surface sculptured only by feeble incremental lines; epidermis polished with one or two darker concentric color zones and a microscopic, irregular, radially disposed wrinkling, most con-